

CLIMATOLOGICAL TABLES.*

CONDENSED CLIMATOLOGICAL SUMMARY.

In the following table are given for the various sections of the climatological service of the Weather Bureau the monthly average temperature and total rainfall; the stations reporting the highest and lowest temperatures, with dates of occurrence; the stations reporting the greatest and least total precipitation; and other data as indicated by the several headings.

The mean temperature for each section, the highest and lowest temperatures, the average precipitation, and the greatest and least monthly amounts are found by using all trustworthy records available.

The mean departures from normal temperatures and precipitation are based only on records from stations that have 10 or more years of observations. Of course the number of such records is smaller than the total number of stations.

Condensed climatological summary of temperature and precipitation by sections, June, 1919.

Section.	Temperature.								Precipitation.							
	Section average.		Departure from the normal.		Monthly extremes.				Section average.		Departure from the normal.		Greatest monthly.		Least monthly.	
	Station.	Highest.	Date.	Station.	Lowest.	Date.	Station.	Amount.	Station.	In.	In.	Station.	Amount.	Station.	Amount.	
Alabama...	° F.	° F.	Ashville.....	100	15	2 stations.....	56	6	St. Bernard.....	11.32	Wetumpka.....	1.29				
Arizona...	77.1	+0.4	Mohawk.....	120	26	Snowflake.....	20	2	Fort Huachuca.....	4.47	33 stations.....	0.00				
Arkansas...	76.9	+0.1	Pine Bluff.....	100	17	Mount Ida.....	45	4	Iocahontas.....	9.80	Princeton.....	2.07				
California...	67.9	-1.1	2 stations.....	121	26	La Porte.....	23	11	Crescent City.....	0.47	212 stations.....	0.00				
Colorado...	60.6	+0.3	2 stations.....	104	29	2 stations.....	10	2	Burlington.....	5.14	6 stations.....	0.00				
Florida...	78.0	-0.9	Jasper.....	100	22	Orange City.....	86	15	Switzerland.....	15.48	Garniers (near).....	0.95				
Georgia...	77.7	-0.1	Alapaha.....	101	22	Tate.....	53	7	Statesboro.....	16.55	Griffin.....	1.46				
Hawaii (May)...	71.7	+0.2	Mahukona.....	95	23	Glenwood.....	44	2	Eke Maui.....	18.50	4 stations.....	0.00				
Idaho...	61.3	+2.5	Weiser.....	109	22	Obsidian.....	15	1	Wallace.....	0.71	66 stations.....	0.00				
Illinois...	75.0	+3.7	6 stations.....	96	13	Sycamore.....	44	28	Nashville.....	9.97	Sycamore.....	1.52				
Indiana...	75.3	+3.7	Crawfordsville.....	98	12	Howe.....	44	28	Decker.....	9.83	Veedersburg.....	1.22				
Iowa...	71.9	+2.8	Onawa.....	98	23	Chariton.....	41	4	Alta.....	12.25	Keosauqua.....	1.82				
Kansas...	72.3	-0.5	Abilene.....	103	25	2 stations.....	33	2	Marion.....	8.71	Deerfield.....	0.32				
Kentucky...	76.7	+3.0	Earlington.....	103	17	Beattyville.....	51	29	Weeksbury.....	8.04	Franklin.....	1.48				
Louisiana...	78.3	-1.7	Robeline.....	101	18	Kelley (near).....	46	4	Paradis.....	13.74	Dodson.....	1.51				
Maryland-Delaware...	72.1	+2.0	2 stations.....	98	3	Grantsville, Md.....	40	28	Frederick, Md.....	5.47	Millsboro, Del.....	0.51				
Michigan...	70.4	+7.0	do.....	99	1	2 stations.....	29	28	Maple Ridge.....	5.33	Seney.....	0.18				
Minnesota...	67.9	+3.3	Lynd.....	96	18	Roseau.....	27	3	Candy.....	10.10	Hallowell.....	1.86				
Mississippi...	78.3	-0.4	Greenwood.....	101	17	Scott.....	51	4	Enterprise.....	9.95	Edwards.....	2.08				
Missouri...	75.0	+1.9	Caruthersville.....	104	16	Cassville.....	44	4	Nevada.....	10.69	Gorin.....	1.91				
Montana...	64.3	+4.5	4 stations.....	107	20	Bowen.....	16	8	White Water.....	3.42	Harlowton.....	0.00				
Nebraska...	70.0	+0.9	Ainsworth.....	105	23	Gordon.....	25	3	Imperial.....	13.73	Melbeta.....	0.71				
Nevada...	65.7	+1.2	Logandale.....	112	27	2 stations.....	22	1	5 stations.....	T	41 stations.....	0.00				
New England...	66.0	+1.4	2 stations.....	102	3	Somerset, Vt.....	22	22	Emosburg Falls, Vt.....	5.12	Vernon, Vt.....	0.82				
New Jersey...	69.5	+0.3	do.....	99	3	Culvers Lake.....	37	29	Culvers Lake.....	6.45	Cape May.....	1.15				
New Mexico...	65.6	-2.8	Blackrock.....	103	28	Harvey's Upper Ranch.....	15	2	Barneys Upper Ranch.....	7.48	Farmington.....	0.00				
New York...	69.3	+4.6	Indian Lake.....	105	5	Gabriels.....	24	29	Boillvar.....	6.22	Buffalo.....	0.54				
North Carolina...	73.1	-0.5	2 stations.....	100	21	Wenona.....	43	14	Highlands.....	10.00	Durham.....	1.66				
North Dakota...	67.1	+4.3	4 stations.....	108	28	Howard.....	22	2	Cando.....	8.70	Dickinson.....	0.52				
Ohio...	74.2	+5.2	Milligan.....	100	1	2 stations.....	41	29	2 stations.....	7.89	Sandusky.....	0.91				
Oklahoma...	74.5	-1.8	Sallisaw.....	100	7	Kenton.....	34	3	Thiota.....	9.45	Hugo.....	1.05				
Oregon...	59.4	-0.6	Vale.....	103	19	Lapine.....	12	11	Cascadia.....	2.26	11 stations.....	0.00				
Pennsylvania...	71.2	+4.0	Palmerston.....	103	3	West Bingham.....	32	29	Franklin.....	9.17	Somerset.....	1.74				
Porto Rico...	79.4	+1.0	Canovanas.....	98	19	Lares.....	59	23	Conovanas.....	18.54	Cabo Rojo.....	1.12				
South Carolina...	76.1	-1.1	Society Hill.....	101	21	Walhalla.....	46	7	Walhalla.....	11.99	Columbia.....	2.65				
South Dakota...	68.7	+2.6	Camp Crook.....	105	20	Bellefourche.....	21	2	Brookings.....	9.30	Greenmont.....	0.07				
Tennessee...	78.6	+2.1	3 stations.....	98	16	Mountain City.....	49	6†	Sewanee.....	9.32	Carthage.....	0.86				
Texas...	76.3	-3.6	Knickerbocker.....	105	12	Big Spring.....	34	3	Hitchcock.....	21.51	Crowell.....	0.00				
Utah...	66.9	+3.1	St. John.....	110	25	Black's Fork.....	10	1	2 stations.....	0.35	61 stations.....	0.00				
Virginia...	72.2	+0.7	Lincoln.....	99	21	Catawba Sanatorium.....	42	29	Catawba Sanatorium.....	9.91	West Point.....	2.31				
Washington...	58.8	-1.6	3 stations.....	100	19	Colfax.....	23	8	Quinault.....	5.57	11 stations.....	0.00				
West Virginia...	73.0	+3.8	2 stations.....	100	1†	Marlinton.....	40	30	Camden-on-Gauley.....	10.15	Moundsville.....	1.67				
Wisconsin...	69.4	+4.9	Osceola.....	96	19	6 stations.....	35	28	Antigo.....	9.55	Kewaunee.....	0.43				
Wyoming...	63.3	+4.7	Lovell.....	111	29	2 stations.....	12	2	Chugwater.....	1.84	3 stations.....	0.00				

* For explanation of the following table and charts, see this REVIEW, Jan. 1919, pp. 52-53.

† Other dates also.

TABLE III.—*Data furnished by the Canadian Meteorological Service, June, 1919.*

Stations.	Altitude above mean sea level, Jan. 1, 1919.	Pressure.			Temperature of the air.						Precipitation.		
		Station reduced to mean of 24 hours.	Sea level reduced to mean of 24 hours.	Departure from normal.	Mean max. + mean min. + 2.	Departure from normal.	Mean maximum.	Mean minimum.	Highest.	Lowest.	Total.	Departure from normal.	Total snowfall.
St. Johns, N. F.	125	29.91	30.05	+0.14	47.9	-3.7	56.9	39.0	70	28	4.08	+0.48	.....
Sydney, C. B. I.	48	30.07	30.11	+0.16	55.2	-0.2	66.7	43.6	84	34	2.66	-0.57	.....
Halifax, N. S.	88	30.00	30.11	+0.16	57.8	+0.1	67.8	47.8	87	34	2.68	-1.08	.....
Yarmouth, N. S.	95	30.03	30.10	+0.15	56.4	+1.4	65.1	47.7	78	37	1.75	-1.01	.....
Charlottetown, P. E. I.	38	30.05	30.09	+0.17	57.6	+0.2	66.8	48.4	81	36	2.31	-0.36	.....
Chatham, N. B.	28	30.07	30.10	+0.21	61.1	+1.1	73.4	48.9	92	38	1.87	-1.59	.....
Father Point, Que.	20	30.04	30.06	+0.19	54.4	+1.4	63.5	45.3	76	33	2.84	-0.14	.....
Quebec, Que.	298	29.79	30.11	+0.19	65.8	+4.6	76.8	54.8	92	40	2.81	-0.64	.....
Montreal, Que.	187	29.89	30.09	+0.15	68.7	+3.8	78.3	59.1	92	43	4.17	+0.64	.....
Stonecliffe, Ont.	489	29.48	30.08	+0.14	62.7	+1.1	84.5	40.9	98	26	5.08	+1.92	.....
Ottawa, Ont.	236	29.84	30.10	+0.16	70.9	+5.6	82.6	59.2	96	45	2.96	+0.04	.....
Kingston, Ont.	285	29.79	30.10	+0.13	70.0	+6.6	78.3	61.7	91	48	3.48	+1.05	.....
Toronto, Ont.	379	29.65	30.07	+0.10	72.4	+9.0	83.4	61.3	94	47	2.72	-0.08	.....
Cochrane, Ont.	930				67.6		81.8	53.4	92	31	0.48		.....
White River, Ont.	1,244	28.79	30.07	+0.13	64.6	+5.9	79.4	49.9	91	26	1.09	-1.13	.....
Port Stanley, Ont.	592	29.45	30.08	+0.11	70.4	+6.6	80.8	60.0	90	44	1.87	-0.86	.....
Southampton, Ont.	656	29.39			69.2	+8.8	79.2	59.3	93	42	1.24	-1.11	.....
Parry Sound, Ont.	688	29.43	30.11	+0.15	72.0	+10.3	85.0	59.0	97	42	1.66	-0.76	.....
Port Arthur, Ont.	644	29.40	30.12	+0.18	62.0	+5.6	70.8	53.2	87	40	1.18	-1.55	.....
Winnipeg, Man.	760	29.17	29.99	+0.10	67.9	+5.7	78.6	56.2	89	35	4.95	+1.66	.....
Minnedosa, Man.	1,690	28.21	29.99	+0.10	64.4	+4.8	77.0	51.8	87	28	3.36	+0.36	.....
Le Pas, Man.	860				65.0		77.2	52.8	92	35	3.58		.....
Qu'Appelle, Sask.	2,115	27.72	29.93	+0.06	65.7	+5.8	80.0	51.4	94	33	2.95	-0.47	.....
Medicine Hat, Alb.	2,144	27.60	29.81	-0.04	69.2	+7.2	84.1	54.3	103	33	0.81	-1.95	.....
Moose Jaw, Sask.	1,759				68.1		84.3	51.9	101	25	3.24		.....
Swift Current, Sask.	2,392	27.37	29.94	+0.07	66.5	+6.5	82.7	50.4	95	21	0.56	-2.11	.....
Calgary, Alb.	3,423	26.41	29.92	+0.08	59.6	+3.8	77.4	41.9	94	27	0.29	-2.16	.....
Banff, Alb.	4,521	25.39	29.90	+0.06	53.4	+1.9	68.9	38.0	89	26	1.02	-2.31	0.5
Edmonton, Alb.	2,150	27.60	29.85	+0.01	57.8	+0.9	72.2	43.5	89	30	0.87	-1.99	.....
Prince Albert, Sask.	1,450	28.37	29.92	+0.05	64.7	+7.0	78.7	50.7	93	30	2.10	-0.41	.....
Battleford, Sask.	1,502	28.17	29.88	+0.02	64.6	+5.1	79.9	49.3	87	24	1.32	-1.99	.....
Kamloops, B. C.	1,262	28.75	30.04	+0.17	61.6	-2.2	74.8	48.4	96	39	0.67	-0.75	.....
Victoria, B. C.	230	29.83	30.09	+0.08	54.4	-1.9	61.8	47.0	70	43	0.53	-0.67	.....
Barkerville, B. C.	4,180	25.72	30.02	+0.15	46.3	-4.4	57.5	35.1	77	30	3.78	+0.30	11.2
Triangle Island, B. C.	680												
Prince Rupert, B. C.	170												
Hamilton, Ber.	151	29.98	30.14	+0.02	73.1	-1.9	78.4	67.8	83	63	2.82	-3.13

SEISMOLOGY.

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[Dated: Weather Bureau, Washington, D. C., Aug. 2, 1919.]

TABLE I.—*Noninstrumental earthquake reports, June, 1919.*

Day.	Approximate time, Greenwich Civil.	Station.	Approximate latitude.	Approximate longitude.	Intensity Rossi-Forel.	Number of shocks.	Duration.	Sounds.	Remarks.	Observer.
CALIFORNIA.										
June 21	6 55	Lone Pine.....	36 37	118 01	3	1	Sec.	None.....		G. F. Marsh
21	19 58	Lone Pine.....	36 37	118 01	5	1	Several	Loud rumbling.....	Furniture moved.....	G. F. Marsh
24	21 12	San Diego.....	32 43	117 10	4	2	1	None.....	Buildings shaken.....	H. F. Alciatore
24	23 24	Lone Pine.....	36 37	118 01	5	1	25	None.....	Felt by many.....	G. F. Marsh